

CLAIMS

What is claimed is:

1 1. A modular AC section for a power supply unit that provides electrical power to a plurality
2 of electrical equipment, comprising:

3 a top in which a plurality of holes are formed and into which screws are inserted for

4 attaching said modular AC section to said power supply unit;

5 a back adjacent said top;

6 a circuit breaker attached either to said top or back;

7 a connector attached to said top, said connector adapted to mate with a corresponding

8 connector from a power supply module inserted into the modular power supply

9 unit; and

10 wiring that connects said circuit breaker to said connector.

1 2. The modular AC section of claim 1 wherein said connector comprises a blind mating
2 connector.

1 3. The modular AC section of claim 1 wherein said connector comprises a blind mating and
2 hot pluggable connector.

1 4. The modular AC section of claim 1 further including a plurality of connectors attached to
2 said top and adapted to mate with corresponding connectors from power supply modules inserted
3 into the modular power supply unit.

1 5. The modular AC section of claim 4 wherein said connectors comprise blind mating
2 connectors.

1 6. The modular AC section of claim 1 further including a plurality of circuit breakers.

1 7. The modular AC section of claim 1 further including two AC input connections.

1 8. The modular AC section of claim 1 wherein said back is perforated.

1 9. The modular AC section of claim 1 wherein said back is perforated to permit air flow to
2 assist in removing heat from said power supply unit.

1 10. The modular AC section of claim 1 further including a locator post in said top which mates
2 with a corresponding locator recess in said power supply unit.

1 11. The modular AC section of claim 1 further including redundant power feeds.

1 12. A rack of electrical computer equipment, comprising:
2 a plurality of computers housed in said rack;
3 a power supply unit housed in said rack and providing power to said computers, said power
4 supply unit includes a power supply housing mated to said rack in which a power
5 supply module can be inserted and an AC section that mates to said power supply
6 housing and provides output electrical power, said AC section comprises:

7 a top in which a plurality of holes are formed and into which screws are
8 inserted for attaching said AC section to said power supply housing;
9 a back adjacent said top;
10 a circuit breaker attached either to said top or back;
11 a connector attached to said top, said connector adapted to mate with a
12 corresponding connector from a power supply module inserted into
13 the power supply housing; and
14 wiring that connects said circuit breaker to said connector.

1 13. The rack of electrical computer equipment of claim 12 wherein said connector comprises a
2 blind mating connector.

1 14. The rack of electrical computer equipment of claim 12 further including a plurality of
2 connectors attached to said top and adapted to mate with corresponding connectors from power
3 supply modules inserted into the power supply housing.

1 15. The rack of electrical computer equipment of claim 14 wherein said connectors comprise
2 blind mating connectors.

1 16. The rack of electrical computer equipment of claim 12 further including a plurality of
2 circuit breakers.

1 17. The rack of electrical computer equipment of claim 12 further including two AC input
2 connections.

1 18. The rack of electrical computer equipment of claim 12 wherein said back is perforated.

1 19. The rack of electrical computer equipment of claim 12 wherein said back is perforated to
2 permit air flow to assist in removing heat from said power supply unit.

1 20. The rack of electrical computer equipment of claim 12 further including power feeds.

1 21. A rack of electrical computer equipment, comprising:
2 a plurality of computers housed in said rack;
3 a power supply unit housed in said rack and providing power to said computers, said power
4 supply unit includes a power supply housing mated to said rack in which a power
5 supply module can be inserted and a modular means for interconnecting AC input
6 power to a power supply module.

1 22. The rack of electrical computer equipment of claim 21 wherein said modular means is
2 screwed to said power supply housing.

1 23. The rack of electrical computer equipment of claim 21 wherein said modular means
2 comprises redundant power feeds.